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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/836,414	NISHIJIMA ET AL.	
	Examiner	Art Unit	
	Christopher O. Onuaku	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-31 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-31 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 14 of U.S. Patent No. 6,263,151.

Regarding claim 1, claim 14 of the U.S. Patent No. U.S. Patent No. 6,263,151 cite the features of claim 1 of this application including a recording apparatus of a helical scan system comprising a “first” video head which records video signals on a magnetic tape when a running speed of the magnetic tape is a standard speed, a “second” video head which records video signals on the magnetic tape when the running speed of the magnetic tape is approximately 1/N of the standard speed, N being an integer larger than 3 (see lines 1-14).

The invention defined by claim 14 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 1 of this current application. Furthermore, claim 1 of current application is obvious over claim 14 of U.S. Patent No. 6,263,151 because claim 1 of the current application is broader than 14 of U.S. Patent No. 6,263,151. Allowance of claim 1 would result in an unjustified time-wise extension of the monopoly previously granted for the invention defined by patent claim 14, therefore obviousness type double patenting is appropriate.

3. Claim 2 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 16 of U.S. Patent No. 6,263,151.

Regarding claim 2, claim 16 of the U.S. Patent No. 6,263,151 recite the features of claim 2 of this application including wherein the value N is 5 (see lines 1-2).

4. Claim 3 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 14 of U.S. Patent No. 6,263,151.

Regarding claim 3, claim 14 of the U.S. Patent No. 6,263,151 cite the features of claim 3 of this application including wherein the second video head records video signals on the magnetic tape when the running speed of the magnetic tape is approximately 1/3 of the standard speed (see lines 10-14).

The invention defined by claim 14 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 3 of this current application. Furthermore, claim 3 of current application is obvious over claim 14 of U.S. Patent No. 6,263,151 because claim 3 of

the current application is broader than 14 of U.S. Patent No. 6,263,151. Allowance of claim 3 would result in an unjustified time-wise extension of the monopoly previously granted for the invention defined by patent claim 14, therefore obviousness type double patenting is appropriate.

5. Claim 4 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 14 of U.S. Patent No. 6,263,151.

Regarding claim 4, claim 14 of the U.S. Patent No. 6,263,151 cite the features of claim 4 of this application including wherein the second video head records video signals on the magnetic tape when the running speed of the magnetic tape is approximately 1/3 of the standard speed (see lines 10-14).

The invention defined by claim 14 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 4 of this current application. Furthermore, claim 4 of current application is obvious over claim 14 of U.S. Patent No. 6,263,151 because claim 4 of the current application is broader than claim 14 of U.S. Patent No. 6,263,151. Allowance of claim 4 would result in an unjustified time-wise extension of the monopoly previously granted for the invention defined by patent claim 14, therefore obviousness type double patenting is appropriate.

6. Claim 5 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 17 of U.S. Patent No. 6,263,151.

Regarding claim 5, claim 17 of the U.S. Patent No. 6,263,151 cite the features of claim 5 of this application including wherein the value N is 6 (see lines 1-2).

7. Claim 6 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14&15 of U.S. Patent No. 6,263,151.

Regarding claim 6, claims 14 (lines 10-14) & claim 15 (lines 1-6) of the U.S. Patent No. 6,263,151 cite the features of claim 6 of this application including wherein the a head width of the second video head is equal to approximately a track pitch of the video signals recorded on the magnetic tape when the running speed of the magnetic tape is approximately 1/3 of the standard speed .

The invention defined by claims 14&15 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 6 of this current application. Furthermore, claim 6 of current application is obvious over claims 14&15 of U.S. Patent No. 6,263,151 because claim 6 of the current application is broader than claims 14&15 of U.S. Patent No. 6,263,151. Allowance of claim 6 would result in an unjustified time-wise extension of the monopoly previously granted for the invention defined by patent claims 14&15, therefore obviousness type double patenting is appropriate.

8. Claim 7 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14&15 of U.S. Patent No. 6,263,151.

Regarding claim 7, claims 14 (lines 10-14) & claim 15 (lines 1-6) of the U.S. Patent No. 6,263,151 cite the features of claim 7 of this application including wherein the a head width of the second video head is equal to approximately a track pitch of the video signals recorded on the magnetic tape when the running speed of the magnetic tape is approximately 1/3 of the standard speed

The invention defined by claims 14&15 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 7 of this current application. Furthermore, claim 7 of current application is obvious over claims 14&15 of U.S. Patent No. 6,263,151 because claim 7 of the current application is broader than claims 14&15 of U.S. Patent No. 6,263,151. Allowance of claim 7 would result in an unjustified time-wise extension of the monopoly previously granted for the invention defined by patent claims 14&15, therefore obviousness type double patenting is appropriate.

9. Claim 8 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14&15 of U.S. Patent No. 6,263,151.

Regarding claim 8, claims 14 (lines 10-14) & claim 15 (lines 1-6) of the U.S. Patent No. 6,263,151 cite the features of claim 8 of this application including wherein a head width of the second video head is equal to approximately a track pitch of the video signals recorded on the magnetic tape when the running speed of the magnetic tape is approximately 1/3 of the standard speed .

The invention defined by claims 14&15 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 8 of this current application. Furthermore, claim 8 of current application is obvious over claims 14&15 of U.S. Patent No. 6,263,151 because claim 8 of the current application is broader than claims 14&15 of U.S. Patent No. 6,263,151. Allowance of claim 8 would result in an unjustified time-wise extension of the monopoly previously granted for the invention defined by patent claims 14&15, therefore obviousness type double patenting is appropriate.

10. Claim 9 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14&16 of U.S. Patent No. 6,263,151.

Regarding claim 9, claims 14 (lines 10-14) & claim 16 (lines 1-2) of the U.S. Patent No. 6,263,151 cite the features of claim 9 of this application including a switch which switches between a first recording mode in which video signals are recorded on a tape at a standard track pitch, a second recording mode in which video signals are recorded on the tape at a track pitch equal to approximately 1/3 of the standard track pitch, and a third recording mode in which video signals are recorded on the tape at track pitch equal to approximately 1/5 of the standard track pitch.

The invention defined by claims 14&15 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 9 of this current application. Furthermore, claim 9 of current application is obvious over claims 14&15 of U.S. Patent No. 6,263,151 because claim 9 of the current application is broader than claims 14&15 of U.S. Patent No. 6,263,151.

Allowance of claim 9 would result in an unjustified time-wise extension of the monopoly previously granted for the invention defined by patent claims 14&15, therefore obviousness type double patenting is appropriate.

11. Claim 10 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14&16 of U.S. Patent No. 6,263,151.

Regarding claim 10, claims 14 (lines 10-14) & claim 16 (lines 1-2) of the U.S. Patent No. 6,263,151 cite the features of claim 10 of this application including first and second video heads which record video signals on a magnetic tape; and a controller which controls the first and second video heads so that the first video head records video signals at a standard track pitch, and the second video head records video signals at least one of at a track pitch equal to approximately 1/3 and 1/5 of the standard track pitch.

The invention defined by claims 14&15 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 10 of this current application. Furthermore, claim 10 of current application is obvious over claims 14&15 of U.S. Patent No. 6,263,151 because claim 10 of the current application is broader than claims 14&15 of U.S. Patent No. 6,263,151. Allowance of claim 10 would result in an unjustified time-wise extension of the monopoly previously granted for the invention defined by patent claims 14&15, therefore obviousness type double patenting is appropriate.

12. Claim 11 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14&15 of U.S. Patent No. 6,263,151.

Regarding claim 11, claims 14 (lines 10-14) & claim 15 (lines 1-6) of the U.S. Patent No. 6,263,151 cite the features of claim 11 of this application including wherein a head width of the second video head is equal to approximately 1/3 of the standard track pitch .

The invention defined by claims 14&15 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 11 of this current application. Furthermore, claim 11 of current application is obvious over claims 14&15 of U.S. Patent No. 6,263,151 because claim 11 of the current application is broader than claims 14&15 of U.S. Patent No. 6,263,151. Allowance of claim 11 would result in an unjustified time-wise extension of the monopoly previously granted for the invention defined by patent claims 14&15, therefore obviousness type double patenting is appropriate.

13. Claim 12 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14&16 of U.S. Patent No. 6,263,151.

Regarding claim 12, claims 14 (lines 10-14) & claim 16 (lines 1-2) of the U.S. Patent No. 6,263,151 cite the features of claim 9 of this application including a switch which switches between a first recording mode in which video signal is recorded by the first video head at a standard track pitch, a second recording mode in which video

signal is recorded by the first video head at a track pitch equal to approximately 1/3 of the standard track pitch, and a third recording mode in which video signal is recorded by the first video head at track pitch equal to approximately 1/5 of the standard track pitch.

Claims 14&15 of the U.S. Patent No. 6,263,151 fail to explicitly cite the claimed features of claim 12 of this application such as audio head which records audio signals on a magnetic tape, a switch which switches between a first recording mode in which video and audio signals are recorded by the first video head and the audio head at a standard track pitch, a second recording mode in which video and audio signals are recorded by the first video head and the audio head at a track pitch equal approximately 1/3 of the standard track pitch, and third recording mode in which video and audio signals are recorded by the first video head and the audio head at a track pitch equal to approximately 1/5 of the standard track pitch.

Official Notice is taken that it is well known in the art to add an audio head in a recording/reproducing apparatus to record/reproduce audio signals. It, therefore, would have been obvious to add a audio head to the video head of the recording/reproducing apparatus of claim 14 in order to record/reproduce audio signals, and in order that in recording/reproducing video and audio signals, a switch can switch between video and audio heads as required.

14. Claim 13 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14&15 of U.S. Patent No. 6,263,151.

Regarding claim 13, claims 14 (lines 10-14) & claim 15 (lines 1-6) of the U.S. Patent No. 6,263,151 cite the features of claim 13 of this application including first and second video heads which reproduce video signals from a magnetic tape; and a switch which switches the first and second video heads so that the first video head reproduces video signals recorded on the magnetic tape at standard track pitch, and the second video head reproduces video signals recorded on the magnetic tape at a track pitch equal to approximately 1/N of the standard track pitch, N being an integer larger than 3.

The invention defined by claims 14&15 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 13 of this current application. Furthermore, claim 13 of current application is obvious over claims 14&15 of U.S. Patent No. 6,263,151 because claim 13 of the current application is broader than claims 14&15 of U.S. Patent No. 6,263,151. Allowance of claim 13 would result in an unjustified time-wise extension of the monopoly previously granted for the invention defined by patent claims 14&15, therefore obviousness type double patenting is appropriate.

15. Claim 14 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 16 of U.S. Patent No. 6,263,151.

Regarding claim 14, claim 16 of the U.S. Patent No. 6,263,151 cite the features of claim 14 of this application including wherein the value N is 5 (see lines 1-2).

16. Claim 15 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14&15 of U.S. Patent No. 6,263,151.

Regarding claim 15, claim 14 (lines 10-14) and claim 15 (lines 1-6) of the U.S. Patent No. 6,263,151 cite the features of claim 15 of this application including wherein the second video head reproduces video signals recorded on the magnetic tape at a track pitch equal to approximately 1/3 of the standard track pitch.

The invention defined by claims 14&15 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 15 of this current application. Furthermore, claim 15 of current application is obvious over claims 14&15 of U.S. Patent No. 6,263,151 because claim 15 of the current application is broader than claims 14&15 of U.S. Patent No. 6,263,151. Allowance of claim 15 would result in an unjustified time-wise extension of the monopoly previously granted for the invention defined by patent claims 14&15, therefore obviousness type double patenting is appropriate.

17. Claim 16 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14&15 of U.S. Patent No. 6,263,151.

Regarding claim 16, claim 14 (lines 10-14) and claim 15 (lines 1-6) of the U.S. Patent No. 6,263,151 cite the features of claim 16 of this application including wherein the second video head reproduces video signals recorded on the magnetic tape at a track pitch equal to approximately 1/3 of the standard track pitch.

The invention defined by claims 14&15 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 16 of this current application. Furthermore, claim 16 of current application is obvious over claims 14&15 of U.S. Patent No. 6,263,151 because claim 16 of the current application is broader than claims 14&15 of U.S. Patent No. 6,263,151. Allowance of claim 16 would result in an unjustified time-wise extension of the monopoly previously granted for the invention defined by patent claims 14&15, therefore obviousness type double patenting is appropriate.

18 Claim 17 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 17 of U.S. Patent No. 6,263,151.

Regarding claim 17, claim 17 of the U.S. Patent No. 6,263,151 cite the features of claim 17 of this application including wherein the value N is 6 (see lines 1-2).

19. Claim 18 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14&15 of U.S. Patent No. 6,263,151.

Regarding claim 18, claims 14 (lines 10-14) & claim 15 (lines 1-6) of the U.S. Patent No. 6,263,151 cite the features of claim 18 of this application including wherein a head width of the second video head is equal to approximately 1/3 of the standard track pitch .

The invention defined by claims 14&15 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 18 of this current application. Furthermore, claim 18 of

current application is obvious over claims 14&15 of U.S. Patent No. 6,263,151 because claim 18 of the current application is broader than claims 14&15 of U.S. Patent No. 6,263,151. Allowance of claim 18 would result in an unjustified time-wise extension of the monopoly previously granted for the invention defined by patent claims 14&15, therefore obviousness type double patenting is appropriate.

20. Claim 19 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14&15 of U.S. Patent No. 6,263,151.

Regarding claim 19, claims 14 (lines 10-14) & claim 15 (lines 1-6) of the U.S. Patent No. 6,263,151 cite the features of claim 19 of this application including wherein a head width of the second video head is equal to approximately 1/3 of the standard track pitch .

The invention defined by claims 14&15 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 19 of this current application. Furthermore, claim 19 of current application is obvious over claims 14&15 of U.S. Patent No. 6,263,151 because claim 19 of the current application is broader than claims 14&15 of U.S. Patent No. 6,263,151. Allowance of claim 19 would result in an unjustified time-wise extension of the monopoly previously granted for the invention defined by patent claims 14&15, therefore obviousness type double patenting is appropriate.

21. Claim 20 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14&15 of U.S. Patent No. 6,263,151.

Regarding claim 20, claims 14 (lines 10-14) & claim 15 (lines 1-6) of the U.S. Patent No. 6,263,151 cite the features of claim 20 of this application including wherein a head width of the second video head is equal to approximately 1/3 of the standard track pitch .

The invention defined by claims 14&15 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 20 of this current application. Furthermore, claim 20 of current application is obvious over claims 14&15 of U.S. Patent No. 6,263,151 because claim 20 of the current application is broader than claims 14&15 of U.S. Patent No. 6,263,151. Allowance of claim 20 would result in an unjustified time-wise extension of the monopoly previously granted for the invention defined by patent claims 14&15, therefore obviousness type double patenting is appropriate.

22. Claim 21 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14&15 of U.S. Patent No. 6,263,151.

Regarding claim 21, claims 14 (lines 10-14) & claim 15 (lines 1-6) of the U.S. Patent No. 6,263,151 cite the features of claim 21 of this application including wherein a head width of the second video head is equal to approximately 1/3 of the standard track pitch .

The invention defined by claims 14&15 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 21 of this current application. Furthermore, claim 21 of current application is obvious over claims 14&15 of U.S. Patent No. 6,263,151 because claim 21 of the current application is broader than claims 14&15 of U.S. Patent No. 6,263,151. Allowance of claim 21 would result in an unjustified time-wise extension of the monopoly previously granted for the invention defined by patent claims 14&15, therefore obviousness type double patenting is appropriate.

23. Claim 22 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14&15 of U.S. Patent No. 6,263,151.

Regarding claim 22, claims 14 (lines 10-14) & claim 15 (lines 1-6) of the U.S. Patent No. 6,263,151 cite the features of claim 22 of this application including wherein a head width of the second video head is equal to approximately 1/3 of the standard track pitch .

The invention defined by claims 14&15 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 22 of this current application. Furthermore, claim 22 of current application is obvious over claims 14&15 of U.S. Patent No. 6,263,151 because claim 22 of the current application is broader than claims 14&15 of U.S. Patent No. 6,263,151. Allowance of claim 22 would result in an unjustified time-wise extension of the monopoly previously granted for the invention defined by patent claims 14&15, therefore obviousness type double patenting is appropriate.

24. Claim 23 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14&15 of U.S. Patent No. 6,263,151.

Regarding claim 23, claim 14 (lines 10-14) and claim 15 (lines 1-6) of the U.S. Patent No. U.S. Patent No. 6,263,151 cite the features of claim 23 of this application including a first video head which reproduces video signals recorded on a magnetic tape standard track pitch; and a second video head which reproduces video signals recorded on the magnetic tape at a track pitch equal to approximately 1/5 of the standard track pitch.

The invention defined by claims 14&15 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 23 of this current application. Furthermore, claim 23 of current application is obvious over claims 14&15 of U.S. Patent No. 6,263,151 because claim 23 of the current application is broader than claims 14&15 of U.S. Patent No. 6,263,151. Allowance of claim 23 would result in an unjustified time-wise extension of the monopoly previously granted for the invention defined by patent claims 14&15, therefore obviousness type double patenting is appropriate.

25. Claim 24 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14&15 of U.S. Patent No. 6,263,151.

Regarding claim 24, claims 14 (lines 10-14) & claim 15 (lines 1-6) of the U.S. Patent No. 6,263,151 cite the features of claim 24 of this application including wherein

the second video head reproduces video signals recorded on the magnetic tape at a track pitch equal to approximately 1/3 of the standard track pitch .

The invention defined by claims 14&15 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 24 of this current application. Furthermore, claim 24 of current application is obvious over claims 14&15 of U.S. Patent No. 6,263,151 because claim 24 of the current application is broader than claims 14&15 of U.S. Patent No. 6,263,151. Allowance of claim 24 would result in an unjustified time-wise extension of the monopoly previously granted for the invention defined by patent claims 14&15, therefore obviousness type double patenting is appropriate.

26. Claim 25 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14&15 of U.S. Patent No. 6,263,151.

Regarding claim 25, claims 14 (lines 10-14) & claim 15 (lines 1-6) of the U.S. Patent No. 6,263,151 cite the features of claim 25 of this application including wherein a head width of the second video head is equal to approximately 1/3 of the standard track pitch

The invention defined by claims 14&15 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 25 of this current application. Furthermore, claim 25 of current application is obvious over claims 14&15 of U.S. Patent No. 6,263,151 because claim 25 of the current application is broader than claims 14&15 of U.S. Patent No. 6,263,151. Allowance of claim 25 would result in an unjustified time-wise extension of

the monopoly previously granted for the invention defined by patent claims 14&15, therefore obviousness type double patenting is appropriate.

27. Claim 26 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 14 of U.S. Patent No. 6,263,151.

Regarding claim 26, claim 14 of the U.S. Patent No. U.S. Patent No. 6,263,151 cite the features of claim 26 of this application including a recording/reproducing apparatus of a helical scan system for recording/reproducing a video signal on/from a magnetic tape comprising a "first" head which records/reproduces a video signals at a time of a standard play mode in which a running speed of the magnetic tape is a standard speed, and a "second" video head which records/reproduces a video signal at a time of a 3-ple play mode in which the running speed of the magnetic tape is approximately 1/3 of the standard speed and at a time N-ple play mode in which the running speed of the magnetic tape is approximately 1/N of the standard speed, N being an integer larger than 3 (see lines 1-14).

The invention defined by claim 14 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 26 of this current application. Furthermore, claim 26 of current application is obvious over claim 14 of U.S. Patent No. 6,263,151 because claim 26 of the current application is broader than 14 of U.S. Patent No. 6,263,151. Allowance of claim 26 would result in an unjustified time-wise extension of the monopoly previously granted for the invention defined by patent claim 14, therefore obviousness type double patenting is appropriate.

28. Claim 27 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 16 of U.S. Patent No. 6,263,151.

Regarding claim 27, claim 16 of the U.S. Patent No. 6,263,151 cite the features of claim 27 of this application including wherein the value N is 5 (see lines 1-2).

29. Claim 28 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 17 of U.S. Patent No. 6,263,151.

Regarding claim 28, claim 17 of the U.S. Patent No. 6,263,151 cite the features of claim 28 of this application including wherein the value N is 6 (see lines 1-2).

.30. Claim 29 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14&15 of U.S. Patent No. 6,263,151.

Regarding claim 29, claims 14 (lines 10-14) & claim 15 (lines 1-6) of the U.S. Patent No. 6,263,151 cite the features of claim 29 of this application including wherein a head width of the second video head is equal to approximately a track pitch of the video signals recorded on the magnetic tape at the time of 3-ple play mode.

The invention defined by claims 14&15 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 29 of this current application. Furthermore, claim 29 of current application is obvious over claims 14&15 of U.S. Patent No. 6,263,151 because claim 29 of the current application is broader than claims 14&15 of U.S. Patent No. 6,263,151. Allowance of claim 29 would result in an unjustified time-wise extension of

the monopoly previously granted for the invention defined by patent claims 14&15, therefore obviousness type double patenting is appropriate.

31 Claim 30 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14&15 of U.S. Patent No. 6,263,151.

Regarding claim 30, claims 14 (lines 10-14) & claim 15 (lines 1-6) of the U.S. Patent No. 6,263,151 cite the features of claim 30 of this application including wherein a head width of the second video head is equal to approximately a track pitch of the video signals recorded on the magnetic tape at the time of 3-ple play mode.

The invention defined by claims 14&15 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 30 of this current application. Furthermore, claim 30 of current application is obvious over claims 14&15 of U.S. Patent No. 6,263,151 because claim 30 of the current application is broader than claims 14&15 of U.S. Patent No. 6,263,151. Allowance of claim 30 would result in an unjustified time-wise extension of the monopoly previously granted for the invention defined by patent claims 14&15, therefore obviousness type double patenting is appropriate.

32 Claim 31 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14&15 of U.S. Patent No. 6,263,151.

Regarding claim 31, claims 14 (lines 10-14) & claim 15 (lines 1-6) of the U.S. Patent No. 6,263,151 cite the features of claim 31 of this application including wherein a head width of the second video head is equal to approximately a track pitch of the video signals recorded on the magnetic tape at the time of 3-ple play mode.

The invention defined by claims 14&15 of U.S. Patent No. 6,263,151 is drawn to the same invention as claim 31 of this current application. Furthermore, claim 31 of current application is obvious over claims 14&15 of U.S. Patent No. 6,263,151 because claim 31 of the current application is broader than claims 14&15 of U.S. Patent No. 6,263,151. Allowance of claim 31 would result in an unjustified time-wise extension of the monopoly previously granted for the invention defined by patent claims 14&15, therefore obviousness type double patenting is appropriate.

Claim Rejections - 35 USC § 102

33. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

34 Claims 1-7,9-16,18-21&23-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Augenbraun et al (US 5,444,575).

Regarding claim 1, Augenbraun et al disclose method for increasing the recording time of a digital video tape recorder (VTR) and for supporting multiple normal play modes of digital VTR operation, e.g., a standard play mode of operation and one or

more long play modes of operation, comprising a recording apparatus of a helical scan system, comprising a first video head which records video signals on a magnetic tape when a running speed of the magnetic tape is a standard speed (see Fig.1; heads 110,112,114 &116 any of which can record video signals at the normal spped during standard play recording; col.15, lines 42-47).

Further Augenbruan discloses a second video head which records video signals on the magnetic tape when the running speed of the magnetic tape approximately l/N of the standard speed, N being an integer larger than 3. Augenbraun in col.15, line 55 to col.16, line 8 discloses wherein the reduced rates of 1/N are possible, where n is any odd positive integer. Since N is an odd positive integer, N can be larger 3, or 5, for example, since 5 is an odd positive integer larger than 3. It is noted that Augenbraun discloses an example using N as 3.

Regarding claim 2, Augenbraun discloses wherein the value of N is 5 (see claim 1 discussion wherein the reduced rate of 1/N is possible where n is an odd positive integer of 5, for example.

Regarding claims 3&4, Augenbraun discloses wherein the "second" video head records video signals on the magnetic tape when the running speed of the magnetic tape approximately 1/3 of the standard speed (see col.15, line 55 to col.16, line 51.). It is well known that in a recording/reproducing operation of the SP mode, the travel speed in the tape is controlled so that the scanning position of the head on the magnetic

tape is shifted by every predetermined one track pitch substantially corresponding to the width of the head.

Regarding claims 6&7, the claimed limitations of claims 6&7 are accommodated in the discussions of claims 3&4 above, including the claimed head width being approximately equal to the track pitc (see col.24, line 40 to col.25, line 2)...

Regarding claim 9, the claimed limitations of claim 9 are accommodated in the discussions of claims 1,2&3 above, including the claimed switch (see Fig.6A&6B; and switch 32; col.35, line 51 to col.38, line 45). Here examiner reads the normal play recording mode as recording at the standard track pitch, and the reduced long play recording mode as recording at the reduced rate of 1/3 or 1/5.

Since the claim cites recording at the reduced rates of 1/3 and 1/5, it would have been obvious to record at either at 1/3 or 1/5 reduced rate in order to satisfy the user's desired reduced rate recording, and also since integer numbers 3&5 are both odd positive numbers.

Regarding claim 10, the claimed limitations of claim 10 are accommodated in the discussions of claim 9, including the claimed controller (see Fig.6A&6B; and tape speed motor control unit 24, which controls the normal play tape motor control circuit 34 and the long play tape motor control circuit 36; col.35, line 51 to col.38, line 45).

Regarding claim 11, the claimed limitations of claim 11 are accommodated in the discussions of claim 6 above.

Regarding claim 12, the claimed limitations of claim 12 are accommodated in the discussions of claim 9 above, including the claimed audio head The Augenbraun system discloses the tuner 14 receiving audio/video data bitstream which is processed by the long play data processing circuit 16 and recorded during the long play recording mode (see 35, line 51 to col.38, line 45). Inherently, therefore, an audio head must be available to record the audio data during long play recording mode.

Regarding claim 13, the claimed limitations of claim 13 are accommodated in the discussions of claims 1&9 above, including the reproducing apparatus (see Fig.7; col.38, line 45 to col.40, line 52, wherein Augenbraun discloses the reproducing of audio/video data stream and the processing of the reproduced audio/video data stream to be recorded in standard play recording modes or long play recording modes.

Regarding claim 14, the claimed limitations of claim 14 are accommodated in the discussions of claims 13&5 above.

Regarding claim s15&16, the claimed limitations of claims 15&16 are accommodated in the discussions of claims 15, 3&4 above.

Regarding claims 18-21, Augenbraun discloses wherein a head width of the "second" video head is equal to approximately 1/3 of the standard track pitch (see col.15, line 55 to col.16, line 51).

Regarding claim 23, Augenbraun discloses in Fig.7 and col.38, line 45 to col.40, line 52, a reproducing apparatus of a helicanscan system comprising a first video head which reproduces video signals recorded on a magnetic tape at a standard track pitck (see standard play recording mode with the claimed first video head of the reproducing apparatus of Fig.7) and a second video head which reproduces video signals recorded on the magnetic tape at a track pitch equal to approximately 1/5 of the standard track pitch (see reduced long play recording mode with the claimed second second video head of the reproducing apparatus of Fig.7).

Regarding claims 24&25, the claimed limitations of claims 24&25 are accommodated in the discussions of claim 18 above.

Regarding claim 26, the claimed limitations of claim 26 are accommodated in the discussions of claims 1,13&18 above.

Regarding claim 27, the claimed limitations of claim 27 are accommodated in the discussions of claims 14&26 above.

Regarding claim 28, the claimed limitations of claim 27 are accommodated in the discussions of claims 14&26 above.

Claim Rejections - 35 USC § 103

35. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

36. Claims 5,8,17,22&28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Augenbraun et al in view of Hamaguchi (US 6,091,561).

Regarding claim 5, Augenbraun fails to disclose wherein the value of N is 6.

Hamaguchi teaches a helical scan system magnetic recording/reproduction apparatus that can record and/or reproduce analog or digital information in a long play (LP) mode in addition to a standard play (SP) mode wherein the tape travel speed in the LP to ½ the tape travel speed of the SP mode (where N is even 2 and since N is an even number (see col.8, lines 33-39). It is noted that as shown in col.8, lines 33-39, N =2 is used by Hamaguchi for the sake of simplification. Since N is an even number, N can be any even number 2 or larger than 2, such as 6, for example (see also col.9, line 63 to col.10, line 17 and col.12, lines 10-19; also see col.1, lines 55-60).

It would have been obvious to modify Augenbraun by realizing the recording/reproducing system of Augenbraun with a recording/reproducing time period N, where N is an even number, as taught by Hamaguchi, since making N=even

provides the desirable advantage of reducing the travel speed of the Augenbraun recording/reproducing system during LP mode to even number fractions of the SP mode, thereby facilitating user selection of an even number recording/reproducing speed of N=6, for example.

Regarding claim 8, the claimed limitations of claim 8 are accommodated in the discussions of claims 6&7 above.

Regarding claim 17, the claimed limitations of claim 17 are accommodated in the discussions of claim 5 above.

Regarding claim 22, the claimed limitations of claim 22 are accommodated in the discussions of claim 18 above.

Regarding claim 28, the claimed limitations of claim 28 are accommodated in the discussions of claim 5 above.

Regarding claims 29-31, Hamaguchi further teaches wherein a head width of the "second" video head is equal to approximately a track pitch of the video signals recorded on the magnetic tape at the time of 3-ple play mode (see col.15, line 30 to col.16, line 9; also col.1, lines 55-60 and col.12, lines 36-43).

Conclusion

37. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Onishi et al (US 5,335,116) teach a digital video signal recording system and apparatus operated both in an ordinary recording mode and in a long recording mode which enables recording for N (N: an integer) times as long hours as those in an ordinary recording mode.

Jung (US 5,687,037) a video tape recorder for long-play mode recording and reproducing.

Tsushima et al (US 5,051,846) teach a magnetic recording and reproducing apparatus such as a video tape recorder (VTR), including a VTR designed so that an audio signal is recorded on an extended portion of a video signal recording track.

38. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher O. Onuaku whose telephone number is (571) 272-7379. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 571-272-7375 The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

COO

3/17/05

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